

REMARKS

Claims 1-16 and 19-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,775,891 to Aoki et al. in view of U.S. Patent No. 6,552,705 to Hirota and (WO 99/05567) to Johnson. This rejection is respectfully traversed because there is no proper motivation to combine Aoki et al., Hirota and Johnson so as to teach or suggest the combination of features recited in independent claims 1, 8 and 19. For example, each of amended independent claims 1, 8 and 19 recite, amongst other features, “modulating source data using a look-up table and supplying the modulated source data to a display panel at an initial period of one frame interval” and “a black voltage as black data to the display panel for at least a portion of the rest period of the frame.”

The Final Office Action asserts that it would have been obvious to augment the device of Aoki et al. with the look-up table of Johnson and the additional black data field of Hirota. Applicant respectfully asserts that the combination of the Aoki et al. reference with the Hirota and Johnson references is improper because the modulations and resulting fields that occur in each of the three references are completely different. In other words, Applicant respectfully asserts that the combination of the three references contradicts the function and purpose of each of the devices disclosed in the respective references. MPEP §2143.01 instructs that “[i]f the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. In re Gordon, 773 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

Aoki et al. is directed toward an A/D modulation scheme in which the three least significant bits are applied in the first field of a frame and three most significant bits are applied in the second field of a frame for the purpose of generating a gradation signal for driving an

image display. Johnson is directed toward using a look-up table base and a previous a field frame for the purpose of correcting a field frame to increase the switching speed of an image display. However, using a look-up table on source data in accordance Johnson in the device of Aoki et al. is contradictory to the intended purpose of Aoki et al. to modulate the source data so that the three least significant bits are applied in the first field of a frame and three most significant bits are applied in the second field of a frame for the purpose of generating a gradation signal for driving an image display. If the Examiner persists in maintaining this rejection, Applicant respectfully requests an explanation as to how Aoki et al. is modified with the look-up table of Johnson such that the intended purpose of Aoki et al. is not contradicted.

Hirota is directed toward the use of a black data field in a frame for the purpose of preventing horizontal cross-talk. Thus, combining Hirota with Aoki et al. would add a black data field to the first and second fields taught by Aoki et al. However, such an additional black data frame contradicts the intended purpose of Aoki et al. in generating a gradation signal for driving an image display. In other words, there is no provision in the circuitry of Aoki et al. for an additional third black data field while generating a gradation signal. If the Examiner persists in maintaining this rejection, Applicant respectfully requests an explanation as to how Aoki et al. is modified with the black data field of Hirota such that the intended purpose of Aoki et al. is not contradicted.

At least for the above-described reasons, Applicant respectfully submits that independent claims 1, 8 and 19 are patentable because there is no suggestion or motivation to make the proposed modification suggested by the Final Office Action since the proposed modifications in the Final Office Action would render Aoki et al. unsatisfactory for its intended purpose. Moreover, dependent claims 2-7, 9-18 and 20 are allowable for the same reasons as discussed

above and for the additional features that they recite. Accordingly, Applicant respectfully requests that the pending 35 U.S.C. § 103(a) rejection be withdrawn.

CONCLUSION

Applicant respectfully requests reconsideration under 37 C.F.R. § 1.116. Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicant's undersigned representative to expedite the prosecution.

If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0310. If a fee is required for an extension of time under 37 C.F.R. 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

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Dated: July 29, 2004

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